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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,764	11/09/2001	Gregory S. Rawlins	1744.1330000	5623
26111	7590	09/08/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			VO, DON NGUYEN	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/986,764

Applicant(s)

RAWLINS ET AL.

Examiner

DON N VO

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/23/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-17,26-29,31-40,49 and 51-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-60 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,13-17,26-29,31-34,39,40,49,51,52,61-67,72-78,81 and 82 is/are rejected.
- 7) ☒ Claim(s) 9-12,35-38 and 68-71 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgment***

1. This Office Action is responsive to the Amendment filed on 6/23/2004.

### ***Claim Objections***

2. Claim 36 is objected to because of the following informality:

At line 2, "ffirst" should be changed to – first --. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5-7, 13-17, 26-28, 29, 31-33, 39, 40, 49, 51, 61, 64-66, 72-78, 81 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Richmond et al (4,250,458).

Regarding claims 1, 16, 17, 26, 39, 40, 49, 51, 61, 75-78, 81 and 82, Richmond, as shown in figure 2, teaches a communication receiver comprising a summer (21) and a feedback integrator (amplifier 30 with connecting capacitor and potentiometer), wherein the potentiometer is controlled to vary the time

constant of the integrator and so the frequency response. See column 6, lines 16-34.

Regarding claims 5-7, 13, 28, 29, 31-33, 64-66 and 72, Richmond further teaches the integrator having the amplifier (30), capacitor and potentiometer connecting in a inverting fashion. See column 6, lines 16-20.

Regarding claims 14, 15, 73, and 74, Richmond further teaches amplifiers (23, 24, and 25) coupled downstream of the summer (21) to couple the receiver channel to the integrator. Figure 2.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2631

7. Claims 2, 4, 27, 52, 62, 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al (4,250,458).

Regarding claims 2, 27, 52 and 62, Richmond teaches all subject matter claimed except for particularly using the DC offset correction circuit in the WLAN communication system. However, the DC offset correction circuit of Richmond can be applied in many communication channels. See column 4, lines 30-35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the DC offset correction circuit of Richmond in WLAN since it is just an intended use of the circuit.

Regarding claims 4 and 63, Richmond teaches all subject matter claimed except for particularly setting the frequency response of the integrator to certain frequency responses as claimed. However, the frequency response of the integrator of Richmond can be varied based on the controlled value of the potentiometer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the frequency response of the integrator to certain frequency responses as claimed and such setting would not involve any inventive features since it is just a matter of varying the value of the potentiometer.

8. Claims 8, 34, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richmond et al (4,250,458) in view of Nagata (6,204,789).

Richmond teaches all subject matter claimed except for particularly implementing the variable resistor (potentiometer) using at least one resistor and at least one switch across the resistor. However, Nagata teaches implementing the variable resistor using such configuration for easily controlling the resistant value (step-size). See figure 17A and column 15, lines 24-27. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the potentiometer of Richmond using the implementation as taught by Nagata so that the resistant value can be easily controlled.

***Allowable Subject Matter***

9. Claims 53-60, 79 and 80 are allowed.
10. Claims 9-12, 35-38, and 68-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

11. Applicant's arguments with respect to claims 1, 2, 4-8, 13-17, 26-29, 31-34, 49, 51, and 52 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References Dasgupta (6,084,465) and Urabe et al (5,760,629) are cited because they are pertinent to DC offset compensation circuit.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DON N VO whose telephone number is (571) 272-3018. The examiner can normally be reached on MON - FRI (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOHAMMAD GHAYOUR can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DON N VO  
Primary Examiner  
Art Unit 2631